

Customer No.: 31561
Application No.: 10/604,818
Docket No.: 11260-US-PA

REMARKS

This is a full and timely response to the outstanding nonfinal Office Action mailed March 7, 2007. Reconsideration and allowance of the application and presently pending claims 1 and 2 are respectfully requested.

Claim Rejections – 35 U.S.C. §103

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koyama (US2003/0030382; hereinafter “Koyama”) in view of Komiya (US 6,924,602; hereinafter “Komiya”).

In response thereto, Applicant hereby otherwise traverses these rejections. As such, Applicant submits that the present invention as set forth in claims 1 and 2 is novel and unobvious over Koyama, Komiya, or any of the other cited references, taken alone or in combination, and thus should be allowed.

With respect to claim 1, as originally filed, recites in part:

A method ... comprising:

...

turning on a charging path used by the current source to charge a capacitor of the AMOLED pixel;

in an initial stage of the turning on of the charging path used by the current source to charge the capacitor of the AMOLED pixel, providing a pre-charging signal to the current source to have the

Customer No.: 31561
Application No.: 10/604,818
Docket No.: 11260-US-PA

**capacitor discharged in advance in response to a scanning control
signal... (*Emphasize added*)**

In rejecting claim 1, the Examiner admitted that the primary reference, Koyama, “does not disclose an initial stage of the turning on of the charging path used by the current source to charge the capacitor of the AMOLED pixel, providing a pre-charging signal to the current source to have the capacitor discharged”. In addition, the Examiner further cited Komiya as a second reference to teach such limitations. The Examiner contended: “Komiya discloses an initial stage of the turning on of the charging path used by the current source to charge the capacitor of the AMOLED pixel (col. 3, lines 66-col. 4, lines 36), providing a pre-charging signal to the current source to have the capacitor discharged (col. 3, lines 66-col. 4, lines 36)”. However, Applicant respectfully disagrees.

Firstly, in Figures 1 and 2 of Komiya, when the gate line 0 is on, the TFT3 and the TFT4 are turned on, so that the electric charges accumulated in the capacitor of the organic EL element EL and the TFT2 will be discharged, and then the afterimage can be reliably prevented (col. 4, ll. 26-32 and Figure 8). In addition, storage capacitor SC now is *charged* by the power source PVDD, rather than discharged. It is noted, in Komiya, that the “capacitor of the organic EL element” refers to the *parasitic capacitor* rather than the storage capacitor SC used for controlling the control TFT (i.e., TFT2) (col. 2, ll. 3-10 and col. 3, line 66-col. 4, line 14 and Figure 8). Therefore, what are being discharged are the charges accumulated in the capacitor of the organic EL element, rather than the charges in

Customer No.: 31561
Application No.: 10/604,818
Docket No.: 11260-US-PA

the storage capacitor SC. In contrast, with reference to Figure 2 of the present application, when the first TFT 210 and the second TFT 220 are turned on by the scanning control signal of the scanning line, the charging path of the capacitor 240 is turned on, where the capacitor 240 is functionally corresponding to the storage capacitor SC in Komiya. Meanwhile, the control system further provides a pre-charging signal (Pre-Charge) to the current source to have the capacitor 240 discharged in advance. For this reason, Komiya does not teach or suggest the limitation of “in an initial stage of the turning on of the charging path used by the current source to charge the capacitor of the AMOLED pixel, providing a pre-charging signal to the current source to have the capacitor discharged in advance in response to a scanning control signal” as set forth in claim 1.

Specifically, in column 4, lines 16-26, Komiya describes:

“the TFT3 is turned on by the upper gate line. Specifically, the upper side of the organic EL element EL, namely the drain of the TFT2, is connected to the negative power VEE at the time point one horizontal line before the time point for turning the TFT 1 on, and the charges accumulated in the capacitor of the organic EL element EL are discharged. As a result, when the gate line 1 for the TFT3 is then selected, block data is written, and an electrical current is prevented from flowing in the organic EL element EL when the TFT2 turns off, such that generation of an afterimage can be reliably prevented.”

In this cited paragraph, Komiya employs the TFT3, the TFT4 and upper TFT3's gate line to make the capacitor of the organic EL element EL discharge, wherein the capacitor of the organic EL element EL is a *parasitic capacitor* formed between the drain

Customer No.: 31561
Application No.: 10/604,818
Docket No.: 11260-US-PA

and the source of the TFT2, such that the discharged capacitor is the parasitic capacitor, rather than the storage capacitor SC.

Therefore, for at least the foregoing reasons, Koyama, Komiya, alone or in combination, fail to teach each and every element of the claimed invention. As such, claim 1, as previously presented is novel and unobvious over Koyama, Komiya, and thus should be allowed.

Claim 2 depends on allowable independent claim 1, and thus should also be allowable.

Customer No.: 31561
Application No.: 10/604,818
Docket No.: 11260-US-PA

CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-2 are in proper condition for allowance and an action to such effect is earnestly solicited. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Date :

May 16, 2007

Respectfully submitted,

Belinda Lee
Belinda Lee

Registration No.: 46,863

Jianq Chyun Intellectual Property Office
7th Floor-1, No. 100
Roosevelt Road, Section 2
Taipei, 100
Taiwan
Tel: 011-886-2-2369-2800
Fax: 011-886-2-2369-7233
Email: belinda@jicgroup.com.tw
Usa@jicgroup.com.tw